

2nd 80s Fire

Deer Park, Texas

Large Equipment and Vessel (Southwest Shipyard)
Decontamination Plan

Version 1.0

Date: 04/14/2019

Approval:

Position	Name	Signature	Date
Incident Commander			
FOSC			
SOSC			

Preface:

The 2nd 80s Fire Equipment Decontamination Plan provides the plan for the decontamination of on-water response equipment and small response vessels at the Enterprise location (15902 Peninsula St, Houston 77015), and has been submitted for UC approval.

This separate Large Equipment and Vessel Decontamination Plan provides the plan for decontamination of large response vessels and barges, all MSRC equipment, and other response equipment that may be too large to handle at the Enterprise site.



SOUTHWEST SHIPYARD, L.P.

18310 Market Street, Channelview, Texas 77530 Phone: 281-860-3200 Fax: 281-
8502 Cypress Street, Houston, Texas 77012 Phone: 713-967-6300 Fax: 713-967-6301
1002 Texas Clipper Rd., Galveston, Texas 77554 Phone: 409-740-3755 Fax: 409-740-3451

SOUTHWEST SHIPYARD L.P. DECON PLAN

In addition to the details listed below, Southwest Shipyard personnel will follow the process and procedures as outlined in MSRC, T&T, and all response vessels requested or assigned to Southwest Shipyard for decontamination.

1.1 Supervision and Preparations:

1.1.1 Supervision:

The Shipyard consistent with the US Coast Guard Operations Manual and COTP requirements designates a Person IN Charge (PIC) of the operation.

This Person:

- a. Has proven experience in tank vessel cleaning and or stripping and knows:
 - 1) The hazards of current vessel chemical and or has immediate access to such information and;
 - 2) Understands the Shipyard's procedures for vessel decontamination and cleaning.
- b. Shall have direct supervision and control of all vessel decontamination and cleaning operations and have a thorough knowledge of the use and application of the following
 - 1) Oxygen Analyzer
 - 2) Combustible Gas Detectors
 - 3) Benzene Detectors
 - 4) Tank Entry Procedures
 - 5) Shipyard Safety Guidelines

1.1.2 Preparations: The following procedures will be implemented in preparation for decontamination of vessels:

- 1) Safety Meeting: A safety meeting is conducted by the PIC. The meeting covers the Material Safety Data Sheet (SDS). Procedures separately developed for handling spills will be covered. Handling, storage, and decontamination procedures are reviewed.
- 2) Work Areas: If manned vessels are alongside the vessel being decontaminated, their personnel will be notified and compliance with all appropriate safety measures shall be taken. Additionally, the area in the immediate vicinity of the vessel operations access allowed to authorize personnel only.
- 3) Portable Lamps and Electrical Equipment: Portable electric equipment shall be used only in designated "Safe Work Area". Only approved explosion-proof, battery fed, portable lamps and flashlights will be used.



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MSRC 210 ft Oil Spill Response Vessels

Boom: contractor boom

Boom shall be placed in and cleaned in the barge cleaning fully contained area. Any equipment cleaned outside of barge cleaning area shall be decon pools for cleaning. All cleaning shall be to the satisfaction of the customer representative on scene at the decon site.

Special attention should be given to the cable pockets and openings in the boom skirt when cleaning.

Areas are hard to clean.

Upon acceptance of the boom as clean. All boom shall be placed back onto the vessels with original quantities as directed by representative at the decon site.

EFC Sea Sentry Boom

Boom shall be placed in the barge cleaning fully contained area and cleaned to the satisfaction of the customer representative.

All special handling requirements will be provided by customer representative for the boom once in decon.

Special attention should be given to the air valves for the inflation chambers when pressure washing or soaping boom. Every effort and precaution should be taken not to force water or soap into the air inflation chambers. Air inflation chambers should be in place prior to and during the decon process. Air inflation valves and caps should only be cleaned by hand wiping with soap and water or other cleaning solution.

Special attention should be given to the boom weight chain links. These areas are hard to clean and may require detailed hand cleaning to ensure that all product is removed and the chain is clean.

All end connectors and tow bridles will be broken down by customer personnel and cleaned to the satisfaction of the customer representative at the decon site.

Southwest Shipyard will ensure that any cleaning solutions other than soap and water does not compromise the rubber integrity and vulcanized sections of the boom.

Boom weight is 8.5 lbs per foot. Personnel handling the boom should be aware of pinch points and proper handling of boom due to weight of boom. **Do not lift boom with crane or any other lifting device without consulting the customer representative at the decon site**



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Work Boats

Workboats shall be cleaned to the satisfaction of the contractor company representative present at the decon site. Contractor will be responsible for providing necessary maintenance personnel to disassemble any equipment. Contractor will be responsible for providing necessary rigging requirements and blocking arrangements for their vessels. Contractor will be responsible for re-inventory of vessels.

Decon Disposal:

Southwest Shipyard responsible for all of the removal of product from the response equipment and vessels to the satisfaction of the customer representative on site. Southwest Shipyard responsible for the disposal of all household waste, hazardous solid waste and liquid waste generated during the decon process in accordance with all State and Federal Regulations (RCRA).

All wash water during cleaning process will be routed through our onsite TPDES permitted Water Treatment Facility. (Permit No. WQ000z6o5000, attached)

SBS DECON PLAN:

Personnel shall follow all safety policies of Southwest Shipyard and customer during the decon process. Southwest Shipyard will perform site safety assessment and site safety plan for decon site. Safety meetings shall be held and documented during the entire decon process, prior to the set-up of decon, before the start of each shift, during decon demobe or as designated by the decon site safety officer in charge. MSDS for all products used during the decon process shall be included in the decon site safety plan. MSDS for product recovered shall be included in the decon site safety plan.

SCOPE OF WORK

Cleaning of pontoons, push boats, skimmers, support equipment and ancillary equipment used during the event.

Consumable items shall be properly disposed of in unable to be cleaned by the decon process or as otherwise designated by the customer representative on site.

All recovered product from the incident shall be removed from equipment prior to decontamination process beginning.

All response equipment shall be cleaned in a fashion that none of the equipment and ancillary equipment cleaned shall not put off a sheen on the water when deployed for future training or other purposes.



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Procedures SBS Pontoons

Weight 25,000 pounds per pontoon

Secure SBS pontoons alongside dock area.

Remove all remaining fluids from SBS pontoon tanks to shore side storage.

Remove all loose equipment from SBS decks. Do not lift pontoons with equipment on deck.

Un-pin SBS pontoons and separate pontoons for lifting.

Follow SBS JSA lifting plan for rigging pontoons and lifting into appropriate decon pool for final cleaning.

Set pontoons on pallets with pivot point in the middle for rocking pontoon back to other tank for cleaning.

Once pontoons are in decon pool perform air monitoring assessment of area and open tank hatches to begin ventilation.

Spray cleaning agent in tanks using respiratory protection and pressure washer. Once cleaning agent is sprayed in tanks continue air monitoring of tanks until all LEL levels have reached 0% and oxygen levels are normal.

Remove cleaning agent out from tanks using a small pump.

Once tank levels are sufficient for personnel to work in tanks, perform safety assessment plan for confined space entry and tank cleaning.

Remove above deck manifolds and place in decon pool for break down and cleaning.

Gross decon of the outer hull may be performed during the cleaning process of SBS tank internals.

Upon completion of the SBS tank internal cleaning and customer representative must inspect the tanks internals and sign off as clean.

Upon acceptance by customer representative as clean tanks hatches shall be closed and final cleaning of hull and deck shall be done. Final cleaning of hull and deck to be accepted by customer representative as clean. Upon final cleaning of pontoons and acceptance from customer representative and prior to departure of pontoons from decon.

Prior to departure of SBS pontoons from decon site the following must be performed:



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SBS pontoon manifolds installed back in place and bolted down securely.

All hatches for SBS pontoons must be secured.

All miscellaneous deck equipment and skimmer must be cleaned.

All miscellaneous deck supplies and other ancillaries must be inventoried and stored in its appropriate location.

SBS pontoons and deck equipment must be properly secured on trailer and pontoon prior to departure over the road.

PUSH BOAT PROCEDURES

Remove from water and place on trailer.

Move push boat into appropriate decon area for cleaning process.

Soap and wash push boat with pressure washer until clean. Outer hull, bilges, deck areas and other aspects of push boat shall be cleaned to the satisfaction of the designated customer representative on site.

Prior to departure from decon the following must be performed:

SBS push boat and equipment shall be secured on trailer for transportation.

SBS push boat equipment and ancillaries shall be inventoried and stored prior to departure of the push boat from decon.

DECON SITE

Southwest Shipyard will make every effort to have adequate dock space to safely accommodate the SBS pontoons while dockside.

Southwest Shipyard will have safe area for supporting lifting equipment to remove the pontoons and equipment from the water.

Southwest Shipyard will have adequate lay down area for decon pools and decon related equipment.

Southwest Shipyard will have adequate fresh water supply for pressure washers and rinsing equipment in decon pools.

Detailed map of the decon site should be included in the site safety plan.

The above list is not a required list and should be adjusted in accordance with the spacing and at the discretion of the decon forman and customer. Site safety assessment should provide requirements for safety equipment such as fire extinguishers and other safety gear for the decon site.



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The following cleaning detergents are available for use. Authorization of use of any detergent will be given by customer representative on site prior to any use. SDS are provided with this plan and will be provided on site.

Voyage Cleaner

Simple Green

Dyna-Solv Butyl Degreaser

Diesel



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 6, 2018

Dennis Ford, Water Works Manager
Southwest Shipyard L.P.
18310 Market Street
Channelview, Texas 77530

RE: Southwest Shipyard L.P.
Permit No. WQ0002605000

This letter is your notice that the Texas Commission on Environmental Quality (TCEQ) executive director (ED) has acted on the above-named application. According to 30 Texas Administrative Code (TAC) Section 50.135 the ED's action became effective on the date the ED signed the permit or other action. A copy of the final action is enclosed and cites the effective date.

For certain matters, a **motion to overturn**, which is a request that the commission review the executive director's action on an application, may be filed with the chief clerk. Whether a motion to overturn is procedurally available for a specific matter is determined by Title 30 of the Texas Administrative Code Chapter 50. According to 30 TAC Section 50.139, an action by the ED is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

If a motion to overturn is filed, the motion must be received by the chief clerk within 23 days after the date of this letter. An original and 7 copies of a motion must be filed with the chief clerk in person or by mail. The Chief Clerk's mailing address is Office of the Chief Clerk (MC 105), TCEQ, P.O. Box 13087, Austin, Texas 78711-3087. On the same day the motion is transmitted to the chief clerk, please provide copies to Robert Martinez, Environmental Law Division Director (MC 173), and Vic McWherter, Public Interest Counsel (MC 103), both at the same TCEQ address listed above. If a motion is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the ED's action. The procedure and timelines for seeking judicial review of a commission or ED action are governed by Texas Water Code Section 5.351.

Individual members of the public may seek further information by calling the TCEQ Public Education Program, toll free, at 1-800-687-4040.

Sincerely,

A handwritten signature in black ink that reads "Bridget C. Bohac".

Bridget C. Bohac
Chief Clerk

BCB/ms

cc: Vic McWherter, TCEQ Public Interest Counsel (MC 103)

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 6, 2018

Mr. Dennis Ford, Water Works Manager
Southwest Shipyard L.P.
18310 Market Street
Channelview, Texas 77530

Re: Southwest Shipyard L.P., TPDES Permit No. WQ0002605000
(CN600135354; RN100248749)

Dear Mr. Ford:

Enclosed is a copy of the above referenced water quality permit issued on behalf of the Executive Director pursuant to Chapter 26 of the Texas Water Code.

Self-reporting or Discharge Monitoring Forms and instructions will be forwarded to you from the Water Quality Management Information Systems Team so that you may comply with monitoring requirements. For existing facilities, revised forms will be forwarded if monitoring requirements have changed.

Enclosed is a "Notification of Completion of Wastewater Treatment Facilities" form. Use this form (if needed) when the facility begins to operate or goes into a new phase. The form notifies the agency when the proposed facility is completed or when it is placed in operation. This notification complies with the special provision incorporated into the permit, as applicable.

Should you have any questions, please contact Ms. Shannon Gibson of the Texas Commission on Environmental Quality's (TCEQ) Wastewater Permitting Section at (512) 239-4671 or if by correspondence, include MC 148 in the letterhead address below.

Sincerely,

A handwritten signature in dark ink, appearing to read "D W Galindo", with a stylized flourish at the end.

David W. Galindo, Director
Water Quality Division

DWG/SG/rs

cc: Mr. Daniel H. Irvin, Vice President of Environmental Affairs, Southwest Shipyard,
L.P., 18310 Market Street, Channelview, Texas 77530



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES

under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

TPDES PERMIT NO.
WQ0002605000
*[For TCEQ office use only -
EPA I.D. No. TX0092282]*

This major amendment replaces
TPDES Permit No. WQ0002605000,
issued on March 18, 2018.

Southwest Shipyard L.P.

whose mailing address is

18310 Market Street
Channelview, Texas 77530

is authorized to treat and discharge wastes from Southwest Shipyard, a marine vessel cleaning and repair facility (SIC 4491 and 3731)

located at 18310 Market Street in Channelview, Harris County, Texas 77530

via Outfalls 001, 003, 004, 005, and 006 directly to the Houston Ship Channel/San Jacinto River Tidal in Segment No. 1005 of the San Jacinto River Basin

only according to effluent limitations, monitoring requirements, and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, three years from the date of permit issuance.

ISSUED DATE: November 26, 2018


For the Commission

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge treated wastewaters, which include barge wash water, third-party biotreatable wastewater ¹, domestic wastewater, utility wastewaters (vacuum tower cooling water and boiler blowdown), steam condensate, barge ballast water, water treatment wastes ², fresh water filter backwash, and contaminated stormwater runoff subject to the following effluent limitations:

The daily average flow of effluent shall not exceed 0.200 million gallons per day (MGD). The daily maximum flow shall not exceed 0.300 MGD.

Effluent Characteristics	Discharge Limitations				Minimum Self-Monitoring Requirements		
	Daily Average		Daily Maximum		Single Grab	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
	lbs/day	mg/L	lbs/day	mg/L			
Flow	0.200 MGD		0.300 MGD		N/A	1/day	Instantaneous
Chemical Oxygen Demand	190	Report	280	Report	440	1/week	Composite
Carbonaceous Biochemical Oxygen Demand, 5-day	16.6	10	33.3	20	30	1/week	Composite
Total Suspended Solids	29.0	26	64.7	58	85	1/week	Composite
Oil and Grease	18.0	16	39.5	20	20	1/week	Grab
Ammonia Nitrogen	5.0	3.0	10.0	6.0	6.0	1/week	Grab
Cyanide, Free ³	N/A	Report	N/A	Report	N/A	1/week	Grab
Chlorine Residual	N/A	1.0, min	N/A	4.0	4.0	1/week	Grab
Dissolved Oxygen	N/A	4.0, min	N/A	N/A	4.0	1/week	Grab
Sulfide	N/A	N/A	Report	Report	N/A	1/week	Grab
Total Phenols (4AAP)	N/A	N/A	N/A	0.35	0.35	1/week	Grab
Enterococci ^{4, 5}	N/A		Report		N/A	1/month	Grab
Enterococci ^{4, 6}	35		104		104	1/month	Grab
Total Cadmium	N/A	N/A	0.017	0.02	0.02	1/month	Grab
Total Chromium	N/A	N/A	0.371	0.42	0.42	1/month	Grab
Hexavalent Chromium	N/A	N/A	N/A	Report	N/A	1/month	Grab

¹ See Other Requirement Nos. 4, 5, and 6.

² See Other Requirement No. 12.

³ Compliance shall be determined using the analytical method for available cyanide. See Other Requirement No. 10.

⁴ Colony-forming units (cfu) or most probable number (MPN) per 100 mL.

⁵ Effective beginning upon the date of permit issuance and lasting for 365 days.

⁶ Effective beginning one year from the date of permit issuance and lasting until the date of permit expiration.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Outfall Number 001 Cont.

Effluent Characteristics	Discharge Limitations				Minimum Self-Monitoring Requirements		
	Daily Average		Daily Maximum		Single Grab	Report Daily Average and Daily Maximum Measurement Frequency	
	lbs/day	mg/L	lbs/day	mg/L	mg/L		Sample Type
Total Copper	N/A	N/A	0.151	0.091	0.091	1/month	Grab
Total Lead	N/A	N/A	0.123	0.14	0.14	1/month	Grab
Total Mercury	0.0014	0.00085	0.0016	0.0013	0.0013	1/month	Grab
Total Nickel	0.245	0.147	0.513	0.31	0.31	1/month	Grab
Total Zinc	N/A	N/A	Report	0.53	0.53	1/month	Grab
Benzene	N/A	N/A	N/A	0.13	0.13	1/month	Grab
Naphthalene	N/A	N/A	N/A	0.06	0.06	1/month	Grab
Phenanthrene	0.020	0.012	0.041	0.025	0.025	1/month	Grab
BTEX, Total ⁷	0.166	0.10	0.166	0.10	0.10	1/month	Grab
Total Petroleum Hydrocarbons	25.0	15.0	25.0	15.0	15.0	1/month	Grab
Polynuclear Aromatic Hydrocarbons	0.016	0.01	0.016	0.01	0.01	1/month	Grab
Sublethal Whole Effluent Toxicity (WET) limits 8% (Parameter 51712) ⁸							
<i>Menidia beryllina</i> (Chronic NOEC ⁹)	8%		8%		N/A	1/quarter	Composite

2. The effluent shall contain a chlorine residual of at least 1.0 mg/L and a maximum chlorine residual of 4.0 mg/L after a detention of at least 20 minutes (based on peak flow), and shall be monitored once per week, by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.
3. The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/day by grab sample.
4. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
5. Effluent monitoring samples must be taken at the following location: At Outfall 001, after final treatment, prior to leaving company property via the discharge pipe, and prior to entering the San Jacinto River.

⁷ Total of benzene, toluene, ethylbenzene, and total xylenes.

⁸ Report the sublethal No Observed Effect Concentration (NOEC).

⁹ The NOEC is defined as the greatest effluent dilution at which no significant sublethality is demonstrated. Significant sublethality is defined as a statistically significant difference between a specified effluent dilution and the control for the sublethal endpoint.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 003

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge dry dock runoff ¹ and stormwater runoff subject to the following effluent limitations:

Volume: Intermittent and flow-variable.

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average mg/L	Daily Maximum mg/L	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD	N/A	1/day ³	Estimate
Total Suspended Solids ²					
- Upstream	Report	Report	N/A	1/week ³	Grab
- Outfall 003	Report	Report	N/A	1/week ³	Grab
- Net	50	100	100	1/week	Grab
Oil and Grease	N/A	15	15	1/week ³	Grab
Total Arsenic	0.23	0.49	0.49	1/week ³	Grab
Total Copper	Report	Report	N/A	1/week ³	Grab
Total Nickel	0.12	0.25	0.25	1/week ³	Grab
Total Silver	0.007	0.016	0.016	1/week ³	Grab
Total Zinc	N/A	Report	N/A	1/month ³	Grab

2. The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week³ by grab sample.
3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
4. Effluent monitoring samples must be taken at the following location: At Outfall 003, where water from the deck of Dry Dock No. 1 is discharged into the San Jacinto River.

¹ When discharging following external repairs that may include, but are not limited to, sand blasting, refinishing and painting. See Other Requirement No. 7.

² See Other Requirement No. 9.

³ When discharging.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 004

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge dry dock runoff¹ and stormwater runoff subject to the following effluent limitations:

Volume: Intermittent and flow-variable.

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average mg/L	Daily Maximum mg/L	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD	N/A	1/day ³	Estimate
Total Suspended Solids ²					
- Upstream	Report	Report	N/A	1/week ³	Grab
- Outfall 004	Report	Report	N/A	1/week ³	Grab
- Net	50	100	100	1/week ³	Grab
Oil and Grease	N/A	15	15	1/week ³	Grab
Total Arsenic	0.23	0.49	0.49	1/week ³	Grab
Total Copper	Report	Report	N/A	1/week ³	Grab
Free Cyanide ⁴	0.009	0.019	0.019	1/week ³	Grab
Total Nickel	0.12	0.25	0.25	1/week ³	Grab
Total Selenium	Report	Report	N/A	1/week ³	Grab
Total Silver	0.007	0.016	0.016	1/week ³	Grab
Total Zinc	0.25	0.53	0.53	1/week ³	Grab

2. The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week³ by grab sample.
3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
4. Effluent monitoring samples must be taken at the following location: At Outfall 004, where water from the deck of Dry Dock No. 2 is discharged into the San Jacinto River.

¹ When discharging following external repairs that may include, but are not limited to, sand blasting, refinishing and painting. See Other Requirement No. 7.

² See Other Requirement No. 9.

³ When discharging.

⁴ Compliance shall be determined using the analytical method for available cyanide. See Other Requirement No. 10.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 005

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge dry dock runoff ¹ and stormwater runoff subject to the following effluent limitations:

Volume: Intermittent and flow-variable.

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average mg/L	Daily Maximum mg/L	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD	N/A	1/day	Estimate
Total Suspended Solids ²					
- Upstream	Report	Report	N/A	1/week ³	Grab
- Outfall 005	Report	Report	N/A	1/week ³	Grab
- Net	50	100	100	1/week ³	Grab
Oil and Grease	N/A	15	15	1/week ³	Grab
Total Copper	Report	Report	N/A	1/week ³	Grab
Total Zinc	N/A	Report	N/A	1/month ³	Grab

2. The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week ³ by grab sample.
3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
4. Effluent monitoring samples must be taken at the following location: At Outfall 005, where water from the deck of Dry Dock No. 3 is discharged into the San Jacinto River.

¹ When discharging following external repairs that may include, but are not limited to, sand blasting, refinishing and painting. See Other Requirement No. 7.

² See Other Requirement No. 9.

³ When discharging.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTSOutfall Number 006

1. During the period beginning upon the date of permit issuance and lasting through the date of permit expiration, the permittee is authorized to discharge barge ballast water ¹ subject to the following effluent limitations:

Volume: Intermittent and flow-variable.

Effluent Characteristics	Discharge Limitations			Minimum Self-Monitoring Requirements	
	Daily Average mg/L	Daily Maximum mg/L	Single Grab mg/L	Report Daily Average and Daily Maximum Measurement Frequency	Sample Type
Flow	Report, MGD	Report, MGD	N/A	1/day ²	Estimate
Total Suspended Solids	N/A	100	100	1/week ²	Grab
Chemical Oxygen Demand	N/A	150	150	1/week ²	Grab
Oil and Grease	N/A	15	15	1/week ²	Grab

2. The pH must not be less than 6.0 standard units nor greater than 9.0 standard units and must be monitored 1/week ² by grab sample.
3. There must be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.
4. Effluent monitoring samples must be taken at the following location: At Outfall 006, located at latitude 29°47'22", between Outfall 001 and Dry Dock No. 1, where the effluent exits the ballast tanks and prior to entering the San Jacinto River.

¹ Ballast water shall not contact any materials in the barge cargo tanks, spilled materials, or any other materials which could impact the quality of the discharge.

² When discharging.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC §§305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in Texas Water Code §26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

- a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder, and limited to major domestic wastewater discharge facilities with a one million gallons per day or greater permitted flow.
- b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.
- c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.
- d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.
- e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.
- f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

- a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.
 - i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.
 - ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.
- b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.
- c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.
- d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the "daily discharge" is calculated as the total

mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the sampling day.

The "daily discharge" determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the "daily discharge" determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

- e. Bacteria concentration (Fecal coliform, *E. coli*, or Enterococci) – the number of colonies of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the n th root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substitute value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.
- f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as $(\text{Flow, MGD} \times \text{Concentration, mg/L} \times 8.34)$.
- g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

- a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9(a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC §319.9(c).
 - b. Grab sample - an individual sample collected in less than 15 minutes.
- 4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.
 - 5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.
 - 6. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§319.4 - 319.12. Unless otherwise specified, effluent monitoring data shall be submitted each month, to the Enforcement Division (MC 224), by the 20th day of the following month for each discharge that is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act; TWC Chapters 26, 27, and 28; and THSC Chapter 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

- a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.
- b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC Chapter 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

- a. Monitoring samples and measurements shall be taken at times and in a manner so as to be representative of the monitored activity.
- b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR §264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.
- c. Records of monitoring activities shall include the following:
 - i. date, time, and place of sample or measurement;
 - ii. identity of individual who collected the sample or made the measurement;
 - iii. date and time of analysis;
 - iv. identity of the individual and laboratory who performed the analysis;
 - v. the technique or method of analysis; and
 - vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later than 14 days following each schedule date to the Regional Office and the Enforcement Division (MC 224).

7. Noncompliance Notification

- a. In accordance with 30 TAC §305.125(9) any noncompliance that may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective September 1, 2020, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.
 - b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:
 - i. unauthorized discharges as defined in Permit Condition 2(g).
 - ii. any unanticipated bypass that exceeds any effluent limitation in the permit.
 - iii. violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.
 - c. In addition to the above, any effluent violation that deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.
 - d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.
8. In accordance with the procedures described in 30 TAC §§35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.
9. Changes in Discharges of Toxic Substances

All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Enforcement Division (MC 224) in writing within five (5) working days, after becoming aware of or having reason to believe:

- a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - i. one hundred micrograms per liter (100 µg/L);
 - ii. two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

- iii. five (5) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. the level established by the TCEQ.
- b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
- i. five hundred micrograms per liter (500 µg/L);
 - ii. one milligram per liter (1 mg/L) for antimony;
 - iii. ten (10) times the maximum concentration value reported for that pollutant in the permit application; or
 - iv. the level established by the TCEQ.

10. Signatories to Reports

All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC §305.128 (relating to Signatories to Reports).

11. All POTWs must provide adequate notice to the Executive Director of the following:

- a. any new introduction of pollutants into the POTW from an indirect discharger that would be subject to CWA §301 or §306 if it were directly discharging those pollutants;
- b. any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and
- c. for the purpose of this paragraph, adequate notice shall include information on:
 - i. the quality and quantity of effluent introduced into the POTW; and
 - ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

- a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.
- b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:
 - i. violation of any terms or conditions of this permit;
 - ii. obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
 - iii. a change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
- c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending, or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

- a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

- b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.
- c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- d. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment.
- e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.
- f. A permit may be amended, suspended and reissued, or revoked for cause in accordance with 30 TAC §§305.62 and 305.66 and TWC §7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.
- h. In accordance with 30 TAC §305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility that does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.
- i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Texas Water Code §§7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations including, but not limited to, negligently or knowingly violating the federal CWA §§301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in a permit issued under the CWA §402, or any requirement imposed in a pretreatment program approved under the CWA §§402(a)(3) or 402(b)(8).

3. Inspections and Entry

- a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC Chapter 361.
- b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit, or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC §7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment or Renewal

- a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:
 - i. the alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC §305.534 (relating to New Sources and New Dischargers); or
 - ii. the alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or
 - iii. the alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.
- c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.
- d. Prior to accepting or generating wastes that are not described in the permit application or that would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.
- e. In accordance with the TWC §26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.
- f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA §307(a) for a toxic pollutant that is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA §307(a) for toxic pollutants within the time provided in the regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

- a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.
- b. A permit may be transferred only according to the provisions of 30 TAC §305.64 (relating to Transfer of Permits) and 30 TAC §50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to Texas Water Code Chapter 11.

8. Property Rights

A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy.

- a. Each permittee shall notify the executive director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:
 - i. the permittee;
 - ii. an entity (as that term is defined in 11 USC, §101(15)) controlling the permittee or listing the permit or permittee as property of the estate; or
 - iii. an affiliate (as that term is defined in 11 USC, §101(2)) of the permittee.
- b. This notification must indicate:
 - i. the name of the permittee;
 - ii. the permit number(s);
 - iii. the bankruptcy court in which the petition for bankruptcy was filed; and
 - iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.
2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge use and disposal and 30 TAC §§319.21 - 319.29 concerning the discharge of certain hazardous metals.

Safety Data Sheet
Dyna-Solv Butyl Degreaser

SDS Revision Date:

05/11/2015



1. Identification

1.1. Product identifier

Product Identity

Dyna-Solv Butyl Degreaser

Alternate Names

Dyna-Solv Butyl Degreaser

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

See Technical Data Sheet.

Application Method

See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name

A One Chemicals & Equipment, Inc.
2902 East X Street
Deer Park, Texas 77536

Emergency

24 hour Emergency Telephone No.

(281) 542-5000

Customer Service: A One Chemicals & Equipment, Inc. (281) 542-5000

Toll Free 877-644-1492

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Corr. 2;H315

Causes skin irritation.

Eye Dam. 1;H318

Causes serious eye damage.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

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H315 Causes skin irritation.

H318 Causes serious eye damage.

[Prevention]:

P260 Do not breathe mist / vapors / spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Ethylene glycol monobutyl ether CAS Number: 0000111-76-2	< 15%	Acute Tox. 4;H332 Acute Tox. 4;H312 Acute Tox. 4;H302 Eye Irrit. 2;H319 Skin Irrit. 2;H315	[1][2]
Dodecylbenzenesulfonic acid. CAS Number: 0027176-87-0	< 15%	Acute Tox. 4;H302 Skin Corr. 1B;H314 Acute Tox. 3;H311 Eye Dam. 1;H318	[1]
Potassium hydroxide. CAS Number: 0001310-58-3	< 15%	Acute Tox. 4;H302 Skin Corr. 1A;H314	[1][2]

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In accordance with paragraph (I) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	If symptoms develop, move away from exposure to fresh air. Administer oxygen if breathing is difficult. Administer artificial respiration if breathing has stopped. Keep warm and at rest. Call for prompt medical attention.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Wash with soap and large amounts of water. Remove contaminated clothing including shoes, after flushing has begun. Get prompt medical attention. Do not reuse until thoroughly cleaned or laundered.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	<p>Route(s) of Entry: Inhalation, Skin, and Ingestion</p> <p>Health Hazards (Acute and Chronic): EYES: May cause discomfort, injury, and burns. SKIN: May cause moderate to severe irritation to skin. Repeated exposure may cause skin dryness or cracking. Concentrate will dry out and chap sensitive skin as would detergent and caustic exposure. INGESTION: Nausea and vomiting, upset stomach. GI tract tissue damage. INHALATION: Not expected to be a relevant route of exposure. May be irritating or damaging to the nose, throat, and upper respiratory tract. Fumes may upset stomach..</p> <p>Signs and Symptoms of Exposure: Eye irritation sign and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Dermatitis signs and symptoms may include a burning sensation, redness, swelling, and/or blisters.</p>
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Medical Conditions (Generally Aggravated by Exposure) Pre-existing skin and eye disorders may be aggravated by exposure. Symptoms similar to burns.

See section 2 for further details.

Safety Data Sheet
Dyna-Solv Butyl Degreaser

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Eyes	Causes serious eye damage.
Skin	Causes severe skin burns and eye damage.

5. Fire-fighting measures

5.1. Extinguishing media

Water, Class C, Foam

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of Carbon

Do not breathe mist / vapors / spray.

5.3. Advice for fire-fighters

Non-flammable

ERG Guide No. ---

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Stop Release or Spill. **SMALL SPILL:** For a small spill, take up material with an absorbent such as clay or sand and dispose of properly per local, state, and federal regulations. **LARGE SPILL:** Wear respirator and protective clothing as appropriate. Shut off source of leak. Dike and contain spilled material. Remove with vacuum trucks or pump to storage/salvage containers. Soak up residue with an absorbent such as clay, sand or other suitable material. Flush area with water to remove trace residue. Consult an expert on disposal of recovered material and ensure conformity to local, state, and federal regulations.

7. Handling and storage

7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

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7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Keep container closed. Handle and open container with care. Store in a cool, well-vented location. Place away from incompatible materials. Do NOT reuse empty containers without commercial cleaning or reconditioning. Storage Temperature: 70oF minimum to 125oF maximum Loading Temperature: 70oF minimum to 150oF maximum
Incompatible materials: Strong oxidizing agents and acids.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	TWA 50 ppm (240 mg/m3) [skin]
		ACGIH	TWA: 20 ppm Revised 2003,
		NIOSH	TWA 5 ppm (24 mg/m3) [skin]
		Supplier	No Established Limit
0001310-58-3	Potassium hydroxide.	OSHA	No Established Limit
		ACGIH	Ceiling: 2 mg/m3
		NIOSH	C 2 mg/m3
		Supplier	No Established Limit
0027176-87-0	Dodecylbenzenesulfonic acid.	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0001310-58-3	Potassium hydroxide.	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No

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0027176-87-0	Dodecylbenzenesulfonic acid.	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory

Not required unless product mist or vapor is created. Use a NIOSH-Approved respirator as required to prevent overexposure. In accord with 20CFR 1910.134, use either atmosphere-supplying or air-purifying respirator for organic vapors. For EO: If occupational exposure may or does exceed 1 ppm, respiratory protection is required. Use a NIOSH-Approved, atmosphere-supplying, full face piece respirator in pressure demand mode >10 ppm. NIOSH has approved full face- piece canister respirator with an end of service life indicator for >10ppm.

Eyes

Safety glasses with side shields, goggles or face shield are recommended.

Skin

Clean, long-sleeved clothing and rubber boots should be worn. Neoprene or nitrile gloves required.

Engineering Controls

Local Exhaust: Recommended
Mechanical (General): Recommended

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Blue Liquid
Odor	Mild
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point	Liquid
Initial boiling point and boiling range	205F
Flash Point	Pensky-Marten's Closed Cup
Evaporation rate (Ether = 1)	> 5 (Butyl Acetate=1)
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 1.0 Upper Explosive Limit: 10.0
Vapor pressure (Pa)	< 0.1 (mm Hg)
Vapor Density	> 5 (Air=1)
Specific Gravity	1.073 (H2O=1)
Solubility in Water	100%
Partition coefficient n-octanol/water (Log Kow)	Not Measured

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Auto-ignition temperature
Decomposition temperature
Viscosity (cSt)

Not Measured
Not Measured
Not Measured

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Oxidizers

10.5. Incompatible materials

Strong oxidizing agents and acids.

10.6. Hazardous decomposition products

Oxides of Carbon

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ethylene glycol monobutyl ether - (111-76-2)	1,414.00, Guinea Pig - Category: 4	1,200.00, Guinea Pig - Category: 4	173.00, Guinea Pig - Category: NA	No data available	No data available
Dodecylbenzenesulfonic acid. - (27176-87-0)	No data available	No data available	No data available	No data available	No data available
Potassium hydroxide. - (1310-58-3)	365.00, Rat - Category: 4	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
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Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes severe skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ethylene glycol monobutyl ether - (111-76-2)	220.00, Fish (Piscis)	1,000.00, Daphnia magna	Not Available
Dodecylbenzenesulfonic acid. - (27176-87-0)	Not Available	Not Available	Not Available
Potassium hydroxide. - (1310-58-3)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

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13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user	No further information		

15. Regulatory information

Regulatory Overview	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
Toxic Substance Control Act (TSCA)	All components of this material are either listed or exempt from listing on the TSCA Inventory.
WHMIS Classification	D2B E
US EPA Tier II Hazards	Fire: No Sudden Release of Pressure: No Reactive: No Immediate (Acute): Yes Delayed (Chronic): No

EPCRA 311/312 Chemicals and RQs (lbs):

Dodecylbenzenesulfonic acid. (1,000.00)

Potassium hydroxide. (1,000.00)

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

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EPCRA 313 Toxic Chemicals:

Ethylene glycol monobutyl ether

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Dodecylbenzenesulfonic acid.

Ethylene glycol monobutyl ether

Potassium hydroxide.

Pennsylvania RTK Substances (>1%):

Dodecylbenzenesulfonic acid.

Ethylene glycol monobutyl ether

Potassium hydroxide.

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats

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are not applicable.

End of Document

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1. Identification

1.1. Product identifier

Product Identity

Dyna-Solv Butyl Degreaser

Alternate Names

Dyna-Solv Butyl Degreaser

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use

See Technical Data Sheet.

Application Method

See Technical Data Sheet.

1.3. Details of the supplier of the safety data sheet

Company Name

A One Chemicals & Equipment, Inc.
2902 East X Street
Deer Park, Texas 77536

Emergency

24 hour Emergency Telephone No.

(281) 542-5000

Customer Service: A One Chemicals & Equipment, Inc.

(281) 542-5000
Toll Free 877-644-1492

2. Hazard(s) identification

2.1. Classification of the substance or mixture

Skin Corr. 2;H315

Causes skin irritation.

Eye Dam. 1;H318

Causes serious eye damage.

2.2. Label elements

Using the Toxicity Data listed in section 11 and 12 the product is labeled as follows.



Danger

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H315 Causes skin irritation.

H318 Causes serious eye damage.

[Prevention]:

P260 Do not breathe mist / vapors / spray.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P301+330+331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P304+340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P310 Immediately call a POISON CENTER or doctor / physician.

P363 Wash contaminated clothing before reuse.

[Storage]:

P405 Store locked up.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

Ingredient/Chemical Designations	Weight %	GHS Classification	Notes
Ethylene glycol monobutyl ether CAS Number: 0000111-76-2	< 15%	Acute Tox. 4;H332 Acute Tox. 4;H312 Acute Tox. 4;H302 Eye Irrit. 2;H319 Skin Irrit. 2;H315	[1][2]
Dodecylbenzenesulfonic acid. CAS Number: 0027176-87-0	< 15%	Acute Tox. 4;H302 Skin Corr. 1B;H314 Acute Tox. 3;H311 Eye Dam. 1;H318	[1]
Potassium hydroxide. CAS Number: 0001310-58-3	< 15%	Acute Tox. 4;H302 Skin Corr. 1A;H314	[1][2]

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In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

[2] Substance with a workplace exposure limit.

[3] PBT-substance or vPvB-substance.

*The full texts of the phrases are shown in Section 16.

4. First aid measures

4.1. Description of first aid measures

General	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Inhalation	If symptoms develop, move away from exposure to fresh air. Administer oxygen if breathing is difficult. Administer artificial respiration if breathing has stopped. Keep warm and at rest. Call for prompt medical attention.
Eyes	Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
Skin	Wash with soap and large amounts of water. Remove contaminated clothing including shoes, after flushing has begun. Get prompt medical attention. Do not reuse until thoroughly cleaned or laundered.
Ingestion	If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Overview	<p>Route(s) of Entry: Inhalation, Skin, and Ingestion</p> <p>Health Hazards (Acute and Chronic): EYES: May cause discomfort, injury, and burns. SKIN: May cause moderate to severe irritation to skin. Repeated exposure may cause skin dryness or cracking. Concentrate will dry out and chap sensitive skin as would detergent and caustic exposure. INGESTION: Nausea and vomiting, upset stomach. GI tract tissue damage. INHALATION: Not expected to be a relevant route of exposure. May be irritating or damaging to the nose, throat, and upper respiratory tract. Fumes may upset stomach..</p> <p>Signs and Symptoms of Exposure: Eye irritation sign and symptoms may include a burning sensation, redness, swelling, and/or blurred vision. Dermatitis signs and symptoms may include a burning sensation, redness, swelling, and/or blisters.</p> <p>Medical Conditions (Generally Aggravated by Exposure) Pre-existing skin and eye disorders may be aggravated by exposure. Symptoms similar to burns.</p> <p>See section 2 for further details.</p>
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Eyes	Causes serious eye damage.
Skin	Causes severe skin burns and eye damage.

5. Fire-fighting measures

5.1. Extinguishing media

Water, Class C, Foam

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Oxides of Carbon

Do not breathe mist / vapors / spray.

5.3. Advice for fire-fighters

Non-flammable

ERG Guide No. —

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up

Stop Release or Spill. **SMALL SPILL:** For a small spill, take up material with an absorbent such as clay or sand and dispose of properly per local, state, and federal regulations. **LARGE SPILL:** Wear respirator and protective clothing as appropriate. Shut off source of leak. Dike and contain spilled material. Remove with vacuum trucks or pump to storage/salvage containers. Soak up residue with an absorbent such as clay, sand or other suitable material. Flush area with water to remove trace residue. Consult an expert on disposal of recovered material and ensure conformity to local, state, and federal regulations.

7. Handling and storage

7.1. Precautions for safe handling

See section 2 for further details. - [Prevention]:

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7.2. Conditions for safe storage, including any incompatibilities

Handle containers carefully to prevent damage and spillage.

Keep container closed. Handle and open container with care. Store in a cool, well-vented location. Place away from incompatible materials. Do NOT reuse empty containers without commercial cleaning or reconditioning. Storage Temperature: 70oF minimum to 125oF maximum Loading Temperature: 70oF minimum to 150oF maximum

Incompatible materials: Strong oxidizing agents and acids.

See section 2 for further details. - [Storage]:

7.3. Specific end use(s)

No data available.

8. Exposure controls and personal protection

8.1. Control parameters

Exposure

CAS No.	Ingredient	Source	Value
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	TWA 50 ppm (240 mg/m3) [skin]
		ACGIH	TWA: 20 ppm Revised 2003,
		NIOSH	TWA 5 ppm (24 mg/m3) [skin]
		Supplier	No Established Limit
0001310-58-3	Potassium hydroxide.	OSHA	No Established Limit
		ACGIH	Ceiling: 2 mg/m3
		NIOSH	C 2 mg/m3
		Supplier	No Established Limit
0027176-87-0	Dodecylbenzenesulfonic acid.	OSHA	No Established Limit
		ACGIH	No Established Limit
		NIOSH	No Established Limit
		Supplier	No Established Limit

Carcinogen Data

CAS No.	Ingredient	Source	Value
0000111-76-2	Ethylene glycol monobutyl ether	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: Yes; Group 4: No;
0001310-58-3	Potassium hydroxide.	OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No

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0027176-87-0	Dodecylbenzenesulfonic acid.	IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;
		OSHA	Select Carcinogen: No
		NTP	Known: No; Suspected: No
		IARC	Group 1: No; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No;

8.2. Exposure controls

Respiratory

Not required unless product mist or vapor is created. Use a NIOSH-Approved respirator as required to prevent overexposure. In accord with 20CFR 1910.134, use either atmosphere-supplying or air-purifying respirator for organic vapors. For EO: If occupational exposure may or does exceed 1 ppm, respiratory protection is required. Use a NIOSH-Approved, atmosphere-supplying, full face piece respirator in pressure demand mode >10 ppm. NIOSH has approved full face- piece canister respirator with an end of service life indicator for >10ppm.

Eyes

Safety glasses with side shields, goggles or face shield are recommended.

Skin

Clean, long-sleeved clothing and rubber boots should be worn. Neoprene or nitrile gloves required.

Engineering Controls

Local Exhaust: Recommended
Mechanical (General): Recommended

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details. - [Prevention]:

9. Physical and chemical properties

Appearance	Blue Liquid
Odor	Mild
Odor threshold	Not Measured
pH	Not Measured
Melting point / freezing point	Liquid
Initial boiling point and boiling range	205F
Flash Point	Pensky-Marten's Closed Cup
Evaporation rate (Ether = 1)	> 5 (Butyl Acetate=1)
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: 1.0 Upper Explosive Limit: 10.0
Vapor pressure (Pa)	< 0.1 (mm Hg)
Vapor Density	> 5 (Air=1)
Specific Gravity	1.073 (H2O=1)
Solubility in Water	100%
Partition coefficient n-octanol/water (Log Kow)	Not Measured

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Auto-ignition temperature
Decomposition temperature
Viscosity (cSt)

Not Measured
 Not Measured
 Not Measured

9.2. Other information

No other relevant information.

10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Oxidizers

10.5. Incompatible materials

Strong oxidizing agents and acids.

10.6. Hazardous decomposition products

Oxides of Carbon

11. Toxicological information

Acute toxicity

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapor LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ethylene glycol monobutyl ether - (111-76-2)	1,414.00, Guinea Pig - Category: 4	1,200.00, Guinea Pig - Category: 4	173.00, Guinea Pig - Category: NA	No data available	No data available
Dodecylbenzenesulfonic acid. - (27176-87-0)	No data available	No data available	No data available	No data available	No data available
Potassium hydroxide. - (1310-58-3)	365.00, Rat - Category: 4	No data available	No data available	No data available	No data available

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Classification	Category	Hazard Description
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Acute toxicity (oral)	---	Not Applicable
Acute toxicity (dermal)	---	Not Applicable
Acute toxicity (inhalation)	---	Not Applicable
Skin corrosion/irritation	2	Causes severe skin irritation.
Serious eye damage/irritation	1	Causes serious eye damage.
Respiratory sensitization	---	Not Applicable
Skin sensitization	---	Not Applicable
Germ cell mutagenicity	---	Not Applicable
Carcinogenicity	---	Not Applicable
Reproductive toxicity	---	Not Applicable
STOT-single exposure	---	Not Applicable
STOT-repeated exposure	---	Not Applicable
Aspiration hazard	---	Not Applicable

12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/l	48 hr EC50 crustacea, mg/l	ErC50 algae, mg/l
Ethylene glycol monobutyl ether - (111-76-2)	220.00, Fish (Piscis)	1,000.00, Daphnia magna	Not Available
Dodecylbenzenesulfonic acid. - (27176-87-0)	Not Available	Not Available	Not Available
Potassium hydroxide. - (1310-58-3)	Not Available	Not Available	Not Available

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

Not Measured

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects

No data available.

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13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

	DOT (Domestic Surface Transportation)	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not Applicable	Not Regulated	Not Regulated
14.2. UN proper shipping name	Not Regulated	Not Regulated	Not Regulated
14.3. Transport hazard class(es)	DOT Hazard Class: Not Applicable	IMDG: Not Applicable Sub Class: Not Applicable	Air Class: Not Applicable
14.4. Packing group	Not Applicable	Not Applicable	Not Applicable
14.5. Environmental hazards			
IMDG	Marine Pollutant: No		
14.6. Special precautions for user	No further information		

15. Regulatory information

Regulatory Overview	The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.
Toxic Substance Control Act (TSCA)	All components of this material are either listed or exempt from listing on the TSCA Inventory.
WHMIS Classification	D2B E
US EPA Tier II Hazards	<div>Fire: No</div> <div>Sudden Release of Pressure: No</div> <div>Reactive: No</div> <div>Immediate (Acute): Yes</div> <div>Delayed (Chronic): No</div>

EPCRA 311/312 Chemicals and RQs (lbs):

Dodecylbenzenesulfonic acid. (1,000.00)

Potassium hydroxide. (1,000.00)

EPCRA 302 Extremely Hazardous:

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

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EPCRA 313 Toxic Chemicals:

Ethylene glycol monobutyl ether

Proposition 65 - Carcinogens (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Developmental Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Female Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Male Repro Toxins (>0.0%):

To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

New Jersey RTK Substances (>1%):

Dodecylbenzenesulfonic acid.

Ethylene glycol monobutyl ether

Potassium hydroxide.

Pennsylvania RTK Substances (>1%):

Dodecylbenzenesulfonic acid.

Ethylene glycol monobutyl ether

Potassium hydroxide.

16. Other information

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

The full text of the phrases appearing in section 3 is:

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H312 Harmful in contact with skin.

H315 Causes skin irritation.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

This is the first version in the GHS SDS format. Listings of changes from previous versions in other formats



Safety Data Sheet
Dyna-Solv Butyl Degreaser

SDS Revision Date:

05/11/2015

are not applicable.

End of Document

Section 1: IDENTIFICATION**Product Name:** Simple Green® All-Purpose Cleaner**Additional Names:****Manufacturer's Part Number:** *Please refer to Section 16**Recommended Use:** Cleaner & Degreaser for water tolerant surfaces.**Restrictions on Use:** Do not use on non-rinsable surfaces.**Company:** Sunshine Makers, Inc.

15922 Pacific Coast Highway

Huntington Beach, CA 92649 USA

Telephone: 800-228-0709 • 562-795-6000 Mon – Fri, 8am – 5pm PST**Fax:** 562-592-3830**Email:** info@simplegreen.com**Emergency Phone:** Chem-Tel 24-Hour Emergency Service: 800-255-3924**Section 2: HAZARDS IDENTIFICATION**

This product has been assessed in accordance to 2012 OSHA Hazard Communication Standards (29 CFR 1910.1200) and has been determined to not be classifiable as hazardous.

OSHA HCS 2012Label Elements**Signal Word:** None**Hazard Symbol(s)/Pictogram(s):** None required**Hazard Statements:** None**Precautionary Statements:** None**Hazards Not Otherwise Classified (HNOC):** None**Other Information:** None Known**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Ingredient</u>	<u>CAS Number</u>	<u>Percent Range</u>
Water	7732-18-5	> 84.8%*
C9-11 Alcohols Ethoxylated	68439-46-3	< 5%*
Sodium Citrate	68-04-2	< 5%*
Sodium Carbonate	497-19-8	< 1%*
Tetrasodium Glutamate Diacetate	51981-21-6	< 1%*
Citric Acid	77-92-9	< 1%*
Methylchloroisoithiazolinone	26172-55-4	< 0.002%*
Methylisoithiazolinone	2682-20-4	< 0.001%*
Fragrance	Proprietary Mixture	< 1%*
Liquitint Colorant	Proprietary Mixture	< 1%*

*specific percentages of composition are being withheld as a trade secret

Section 4: FIRST-AID MEASURES

Inhalation: Not expected to cause respiratory irritation. If adverse effect occurs, move to fresh air.
Skin Contact: Not expected to cause skin irritation. If adverse effect occurs, rinse skin with water.
Eye Contact: Not expected to cause eye irritation. If adverse effect occurs, flush eyes with water.
Ingestion: May cause upset stomach. Drink plenty of water to dilute. See section 11.

Most Important Symptoms/Effects, Acute and Delayed: None known.**Indication of Immediate Medical Attention and Special Treatment Needed, if necessary:** Treat symptomatically

Section 5: FIRE-FIGHTING MEASURES

Suitable & Unsuitable Extinguishing Media: Use Dry chemical, CO₂, water spray or "alcohol" foam. Avoid high volume jet water.
Specific Hazards Arising from Chemical: In event of fire, fire created carbon oxides may be formed.
Special Protective Actions for Fire-Fighters: Wear positive pressure self-contained breathing apparatus; Wear full protective clothing.

This product is non-flammable. See Section 9 for Physical Properties.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures: *For non-emergency and emergency personnel:* See section 8 – personal protection. Avoid eye contact. Safety goggles suggested.

Environmental Precautions: Do not allow into open waterways and ground water systems.

Methods and Materials for Containment and Clean Up: Dike or soak up with inert absorbent material. See section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling: Ensure adequate ventilation. Keep out of reach of children. Keep away from heat, sparks, open flame and direct sunlight. Do not pierce any part of the container. Do not mix or contaminate with any other chemical. Do not eat, drink or smoke while using this product.

Conditions for Safe Storage Including Incompatibilities: Keep container tightly closed. Keep in cool dry area. Avoid prolonged exposure to sunlight. Do not store at temperatures above 109°F (42.7°C). If separation occurs, mix the product for reconstitution.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values: No components listed with TWA or STEL values under OSHA or ACGIH.

Appropriate Engineering Controls: Showers, eyewash stations, ventilation systems

Individual Protection Measures / Personal Protective Equipment (PPE)

Eye Contact: Use protective glasses or safety goggles if splashing or spray-back is likely.
Respiratory: Use in well ventilated areas or local exhaust ventilations when cleaning small spaces.
Skin Contact: Use protective gloves (any material) when used for prolonged periods or dermally sensitive.
General Hygiene Considerations: Wash thoroughly after handling and before eating or drinking.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Green Liquid	Partition Coefficient: n-octanol/water:	Not determined		
Odor:	Added sassafras odor	Autoignition Temperature:	Non-flammable		
Odor Threshold:	Not determined	Decomposition Temperature:	42.7°C (109°F)		
pH ASTM D-1293:	8.5 – 9.2	Viscosity:	Like water		
Freezing Point ASTM D-1177:	0-3.33°C (32-38°F)	Specific Gravity ASTM D-891:	1.01 – 1.03		
Boiling Point & Range ASTM D-1120:	101°C (213.8°F)	VOCs:	**Water & fragrance exemption in calculation		
Flash Point ASTM D-93:	> 212°F	SCAQMD 304-91 / EPA 24:	0 g/L	0 lb/gal	0%
Evaporation Rate ASTM D-1901:	½ Butyl Acetate @ 25°C	CARB Method 310**:	2.5 g/L	0.021 lb/gal	0.25%
Flammability (solid, gas):	Not applicable	SCAQMD Method 313:	Not tested		
Upper/Lower Flammability or Explosive Limits:	Not applicable	VOC Composite Partial Pressure:	Not determined		
Vapor Pressure ASTM D-323:	0.60 PSI @ 77°F, 2.05 PSI @ 100°F	Relative Density ASTM D-4017:	8.42 – 8.59 lb/gal		
Vapor Density:	Not determined	Solubility:	100% in water		

Section 10: STABILITY AND REACTIVITY

Reactivity:	Non-reactive.
Chemical Stability:	Stable under normal conditions 70°F (21°C) and 14.7 psig (760 mmHg).
Possibility of Hazardous Reactions:	None known.
Conditions to Avoid:	Excessive heat or cold.
Incompatible Materials:	Do not mix with oxidizers, acids, bathroom cleaners, or disinfecting agents.
Hazardous Decomposition Products:	Normal products of combustion - CO, CO ₂ .

Section 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:	Inhalation -	Overexposure may cause headache.
	Skin Contact -	Not expected to cause irritation, repeated contact may cause dry skin.
	Eye Contact -	Not expected to cause irritation.
	Ingestion -	May cause upset stomach.

Symptoms related to the physical, chemical and toxicological characteristics: no symptoms expected under typical use conditions.

Delayed and immediate effects and or chronic effects from short term exposure: no symptoms expected under typical use conditions.

Delayed and immediate effects and or chronic effects from long term exposure: headache, dry skin, or skin irritation may occur.

Interactive effects: Not known.

Numerical Measures of Toxicity

Acute Toxicity:	Oral LD ₅₀ (rat)	> 5 g/kg body weight
	Dermal LD ₅₀ (rabbit)	> 5 g/kg body weight

Calculated via OSHA HCS 2012 / Globally Harmonized System of Classification and Labelling of Chemicals

Skin Corrosion/Irritation:	Non-irritant per Dermal Irritation® assay modeling. No animal testing performed.
Eye Damage/Irritation:	Non/Minimal irritant per Ocular Irritation® assay modeling. No animal testing performed.
Germ Cell Mutagenicity:	Mixture does not classify under this category.
Carcinogenicity:	Mixture does not classify under this category.
Reproductive Toxicity:	Mixture does not classify under this category.
STOT-Single Exposure:	Mixture does not classify under this category.
STOT-Repeated Exposure:	Mixture does not classify under this category.
Aspiration Hazard:	Mixture does not classify under this category.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity:	Volume of ingredients used does not trigger toxicity classifications under the Globally Harmonized System of Classification and Labelling of Chemicals.
Aquatic:	Aquatic Toxicity - Low, based on OECD 201, 202, 203 + Microtox: EC ₅₀ & IC ₅₀ ≥100 mg/L. Volume of ingredients used does not trigger toxicity classifications under the Globally Harmonized System of Classification and Labelling of Chemicals.
Terrestrial:	Not tested on finished formulation.
Persistence and Degradability:	Readily Biodegradable per OCED 301D, Closed Bottle Test. Reaches 100% biodegradability within 1 year or less.
Bioaccumulative Potential:	No data available.
Mobility in Soil:	No data available.
Other Adverse Effects:	No data available.

Section 13: DISPOSAL CONSIDERATIONS

Unused or Used Liquid: May be considered hazardous in your area depending on usage and tonnage of disposal – check with local, regional, and or national regulations for appropriate methods of disposal.

Empty Containers: May be offered for recycling.

Never dispose of used degreasing rinsates into lakes, streams, and open bodies of water or storm drains.

Section 14: TRANSPORT INFORMATION

U.N. Number: Not applicable
U.N. Proper Shipping Name: Cleaning Compound, Liquid NOI
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Marine Pollutant - NO
Transport in Bulk (according to Annex II of MARPOL 73/78 and IBC Code): Unknown.
Special precautions which user needs to be aware of/comply with, in connection with transport or conveyance either within or outside their premises: None known.

U.S. (DOT) / Canadian TDG: Not Regulated for shipping.
IMO / IDMG: Not classified as Hazardous

ICAO/ IATA: Not classified as Hazardous
ADR/RID: Not classified as Hazardous

Section 15: REGULATORY INFORMATION

All components are listed on: TSCA and DSL Inventory.

SARA Title III: Sections 311/312 Hazard Categories – Not applicable.
 Sections 313 Superfunds Amendments and Reauthorizations Act of 1986 – Not applicable.
 Sections 302 – Not applicable.

Clean Air Act (CAA): Not applicable

Clean Water Act (CWA): Not applicable

State Right To Know Lists: No ingredients listed

California Proposition 65: No ingredients listed

Texas ESL:

Ethoxylated Alcohol	68439-46-3	60 µg/m ³ long term	600 µg/m ³ short term
Sodium Citrate	68-04-2	5 µg/m ³ long term	50 µg/m ³ short term
Sodium Carbonate	497-19-8	5 µg/m ³ long term	50 µg/m ³ short term
Citric Acid	77-92-9	10 µg/m ³ long term	100 µg/m ³ short term

This product has been classified as “not classifiable as hazardous” in accordance with Consumer Product Safety Commission (16 CFR Chapter 2), and labelled and packaged accordingly.

Section 16: OTHER INFORMATION

<u>Size</u>	<u>UPC</u>	<u>Size</u>	<u>UPC</u>
2 fl. oz.	043318131035	67.6 fl. oz.	043318130144
4 fl. oz.	043318130014	67.6 fl. oz.	043318000393
16 fl. oz.	043318130021	1 gallon	043318000799
22 fl. oz.	043318130229	1 gallon	043318130052
24 fl. oz.	043318130137	1 gallon	043318004957
32 fl. oz.	043318002557	1 gallon w/ dilution bottle	043318480492
32 fl. oz.	043318130335	140 fl. oz. w/ dilution bottle	043318001468
32 fl. oz.	043318000652	2.5 gallon	043318004889

USA items listed only. Not all items listed. USA items may not be valid for international sale.

Section 16: OTHER INFORMATION - continued**NFPA:**

Health – None

Stability – Stable

Flammability – Non-flammable

Special - None

**Acronyms**

NTP National Toxicology Program

IARC

International Agency for Research on Cancer

OSHA Occupational Safety and Health Administration

CPSC

Consumer Product Safety Commission

TSCA Toxic Substances Control Act

DSL

Domestic Substances List

Prepared / Revised By: Sunshine Makers, Inc., Regulatory Department.**This SDS has been revised in the following sections:** Clarification on hazards in section 2, expanded transparency in section 3, revised layout in section 9, 14 & 16, added statement in section 15.

DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.



SAFETY DATA SHEET

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name : Voyage Clean
Product Code : VC
Product Description : All Purpose High-Flash Solvent Based Cleaner and Degreaser

Company : Gyro Chemical and Equipment Co.
5206 Railroad Street
Deer Park Tx. 77536

Telephone : (281)-479-5905
Fax : (281)-479-6239

Emergency Telephone : INFOTRAC 24 hour emergency response 1-800-535-5053 (US and Canada) 1-352-323-3500 (International)

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification: Flammable Liquid, Category 4
Eye Damage, Category 2A
Possible Carcinogen, Category 2

GHS Label Elements:



Signal Word: Warning
Hazard Statement: Combustible Liquid, Causes serious eye irritation, Suspected of Causing cancer <...>
Precaution Statements: Keep away from flames and hot Surfaces – No Smoking
-Store in well ventilated place
-Obtain Special instructions before use.
-Do not handle until all safety and precautions have been read and understood.
-Wear protective gloves/protective clothing/eye protection/face protection.
Response Statement: -In case of fire: Use water fog/foam/dry chemical/carbon dioxide to



extinguish flames. See section 5 for more information.

-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

-If exposed or concerned: Get medical advice/attention.

Environmental Hazard: May be toxic to aquatic organisms, may cause long lasting adverse effects in the aquatic environment.

Storage and Disposal: Refer to sections 7 for storage and 13 for disposal information.

Hazards not otherwise classified:

-Irritating to eyes, respiratory system and skin. Central nervous system depression.

-Combustible. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash/explode if ignited. Material can accumulate static charge which may cause an incendiary electrical discharge.

-If swallowed, may be aspirated and cause lung damage.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Reportable Hazardous Substances and Complex Substances:

Chemical Name	CAS-No.	Concentration
Solvent Naptha (Petroleum), Heavy Aromatic Blend	64742-94-5	≥ 80%
Nonyl phenoxy (polyethyleneoxy)ethanol	68412-54-4	≤ 1%
Nonylphenol ethoxylate	68412-54-4	≤ 1%
Hazardous Constituents Contained in Complex Substances		
Napthalene	91-20-6	≤ 1%
Psudocumene (1,2,4-Trimethylbencene)	95-63-6	≤ 1%

SECTION 4. FIRST AID MEASURES

Inhalation: After high vapor exposure, remove to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If breathing is difficult give oxygen. If breathing is stopped trained personnel should begin resuscitation. It may be dangerous to a person giving mouth-to-mouth resuscitation. Maintain an open airway. Seek immediate medical attention. In case of inhalation of decomposition products in a fire, symptoms may be delayed. Keep exposed persons under medical surveillance for 48 hours.

VOYAGE CLEAN



Version 1. 4/13/15

Skin Contact: If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse.

Eye Contact: If this product enters the eyes, open eyes and gently flush with water. Use sufficient force to open eyelids. Roll eyes to expose more surface area. Minimum flushing is for 15 minutes. Seek immediate medical attention.

Ingestion: If swallowed, CALL PHYSICIAN OR POISON CENTER FOR MOST CURRENT INFORMATION. DO NOT INDUCE VOMITING. Never induce vomiting or give liquids to an unconscious/convulsing/unable to swallow person. Seek immediate medical attention.

SECTION 5. FIRE FIGHTING MEASURES

Extinguishing Media:

- Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO₂) to extinguish flames.
- Inappropriate Extinguishing Media: Straight streams of water.

Specific Hazards:

- Combustible, Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger.
- Combustion products include: Smoke, Fume, Incomplete combustion products, Carbon oxides.

Precautions for Firefighters:

- Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Emergency Notification Procedure:

- In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. U.S. regulations require reporting release of this material into the environment which exceed the reportable quantity or oil spills which could reach any waterway including intermittent creeks. The national response center can be reached at (800)424-8802.

Personal Precautions and Protective Equipment:

- Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required do to combustibility of material. See section 5 for firefighting info. See section 2 for significant hazards. See section 4 for first aid advice. See section 8 for personal protection equipment.

Methods for Containment and Cleanup:

- Stop the spill at the source, dike area and contain. Clean up remainder with absorbent materials. Mop up and dispose of. Prevent entry into waterways, sewers and confined areas.



Vapor reducing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed materials.

SECTION 7. Handling and Storage

Precautions for Safe Handling

-Avoid contact with skin and eyes, do not swallow. Potentially toxic/irritating fumes/vapors may be evolved from heating or agitating chemical. Use with adequate ventilation. Prevent small spills and leakages to avoid slip hazard. Material can accumulate static charge which may cause electrical spark.

Storage

-Store in original container. Keep container closed and handle with care. Open slowly in order to mediate pressure release. Store in cool, well-ventilated areas.

Suitable containers: Tank Cars/Trucks; Barges; Drums; Steel Pails.

Suitable Materials and Coatings: Carbon/Stainless Steel; Copper; Bronze; Zinc Coatings; Epoxy Phenolic; Polyamide/Amine Epoxy; Viton; Polypropylene

Unsuitable Materials and Coatings: Vinyl Coatings; Butyl Rubber; Natural Rubber.

Section 8. Exposure controls and Personal Protection

EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)

Ingredient	Form	Limit / Standard			Note	Source
Naphthalene		TWA	10 ppm	50 mg/m3	N/A	OSHA Z1
Naphthalene		STEL	15 ppm		Skin	ACGIH
Naphthalene		TWA	10 ppm		Skin	ACGIH
Pseudocumene (1,2,4-Trimethylbenzene)		TWA	25 ppm		N/A	ACGIH
1,4-dioxane		TWA	20 ppm			ACGIH
Solvent Naptha (Petroleum), Heavy Aromatic	Vapor	RCP-TWA	17 ppm	100 mg/m3	Total Hydrocarbons	ExxonMobil

Note: Limits/Standards are shown for guidance only Follow applicable regulations.

Engineering Controls

-The levels of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measure to consider: Adequate ventilation should be provided so that exposure limits are not exceeded. Use explosion proof ventilation equipment.

Individual Protection Measures

-Personal protective equipment selections vary depending upon potential exposure conditions such as applications, handling practices, concentration and ventilation. Where ventilation is not adequate to protect worker health an approved respirator may be appropriate. For high vapor concentrations use an approved supplied-air respirator. Neoprene gloves are recommended when handling this material, chemical resistant gauntlet style gloves are recommended. Safety



glasses with side protection are recommended for eye protection. Always observe good hygiene measures and practice good housekeeping.

SECTION 9. Physical and Chemical Properties

Physical State:	Liquid
Color:	Clear, Water White
Odor:	Aromatic
Odor Threshold	N/A
Density (15.5 °C):	0.899 (water = 1)
Flash Point [Method]	66°C (151°F) [ASTM D-56]
Flammable Limits (% vol. in air)	LEL: 0.8 UEL: 5.9
Auto ignition Temp.	545°C (1013°F)
Boiling Point / Range	189°C (367°F) - 204°C (399°F)
Vapor Density (AIR=1)	4.7 at 101 kPa
Vapor Pressure	0.074 kPa (0.56 mm Hg) at 20°C 0.26 kPa (1.95 mm Hg) at 38°C
Evaporation Rate (n-butyl acetate = 1)	< 0.1
pH:	N/A
Solubility in Water	n/a Emulsifies
Viscosity	0.99 cSt (0.99 mm ² /sec) at 40°C
Freezing Point	-18°C (0°F)
Melting Point	N/A
Coefficient of Thermal Expansion	0.00085 V/VDEGC

Section 10. Stability and Reactivity

Stability:	Stable under normal conditions
Reactivity:	No known reactivity hazards
Possible Hazardous Reactions:	Vapors can ignite. Keep away from ignitions sources
Conditions to Avoid:	Open Flame, High energy ignition sources
Incompatible Materials:	Strong Acids, Strong Oxidizers, Strong Bases, Strong Reducing Agents.
Hazardous Decomp. Products:	Material does not decompose at ambient temperatures
Hazardous Polymerization:	Will not occur



Section 11. Toxicological Information

ACUTE TOXICITY

Route of Exposure	Conclusion / Remarks
Inhalation	
Toxicity: Data Available Based on Similar Products	Minimally Toxic
Irritation: Data Available	Elevated temperatures or mechanical action may form vapors, mists, or fumes which may be irritating to eyes nose throat or lungs. Based on test data for structurally similar products.
Ingestion	
Toxicity: LD50 > 3,152 mg/kg based on additive formula for mixture	Minimally Toxic
Skin	
Toxicity: LD50 > 2000 mg/kg Based on similar products.	Minimally Toxic
Irritation: Data Available	Mildly irritating to skin with prolonged exposure
Eye	
Eye Damage: Based on similar products	A statistically significant percentage of ingredients pose a risk of serious damage to the eyes

Physical Symptoms:	This product is irritating to contaminated tissue.
Sensitization:	No component of this product is known to be a sensitizer.
Mutagenicity:	No reported mutagenic effects in humans.
Embryotoxicity:	No reported embryotoxic effects in humans.
Teratogenicity:	No reported teratogen effects in humans
Reproductive Toxicity:	No reported reproductive effects in humans

Chronic/Other Effects

- Vapors above exposure levels are irritating to the eyes and respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness and other central nervous system effects including death.
- Prolonged or repeated skin contact with low viscosity materials may defat skin resulting in irritation or dermatitis.
- Small amounts of liquids aspirated into the lungs can cause chemical pneumonitis or pulmonary edema.



Contains

Naphthalene – CAS# 91-20-3: Listed on NTP SUS; IARC 2B

Exposure to high concentrations of Naphthalene may cause destruction of red blood cells anemia and cataracts. Naphthalene caused cancer in lab animals but is not a known human carcinogen.

Section 12 Ecological Information

Ecotoxicity:	-Material expected to be toxic to aquatic organisms. May cause long term effects in the aquatic environment. This product may be harmful to plant and animal life if released in the environment.
Persistence/Degradability	-Material expected to be inherently biodegradable. Expected to degrade rapidly in the air.
Soil Mobility:	-Material is highly volatile, will partition rapidly into the air. Not expected to partition to sediment or waste water solids.
Other Effects:	-N/A

Section 13. Disposable Considerations

Waste Treatment Methods: -N/A

Section 14. Transport Information

Transport Information:	- UN1268, Petroleum Distillates, N.O.S., Combustible Liquid, PG-III
Hazard Class & Division:	-Combustible Liquid
NOTE:	-This material is not regulated under 49 CFR in a container of 119 gallon capacity or less when transported solely by land as long as the material is not a hazardous waste, a marine pollutant, or specifically listed as a hazardous substance.

Section 15. Regulatory Information

Safety, health, and environmental regulations/legislation specific for this substance or mixture are undefined.



Section 16. Other Information

Date of SDS Revision: 5/20/2015

Additional Information About This Product: None

Disclaimer: This document is generated for the purpose of distributing health, safety, and environmental data. This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine suitability of the information provided for their particular purposes.



SAFETY DATA SHEET

Diesel Fuel

1. IDENTIFICATION

Product Identifier Diesel Fuel

Synonyms: Diesel Fuel, Motor Vehicle Diesel Fuel, Dyed Diesel, * DieselOne®, * DieselOne® w/Platinum Plus DFX, Low Sulfur Diesel (LSD), Ultra Low Sulfur Diesel (ULSD)

Intended use of the product: Fuel

Contact: Global Companies LLC
Water Mill Center
800 South St.
Waltham, MA 02454-9161
www.globalp.com

Contact Information: EMERGENCY TELEPHONE NUMBER (24 hrs): CHEMTREC (800) 424-9300
COMPANY CONTACT (business hours): 800-542-0778

2. HAZARD IDENTIFICATION

According to OSHA 29 CFR 1910.1200 HCS

Classification of the Substance or Mixture

Classification (GHS-US):

Flam. Liquid	Category 3	H226
Skin Corrosion/Irritation	Category 2	H315
Aspiration Hazard	Category 1	H304
STOT SE	Category 3	H336
Carcinogenicity	Category 2	H350
Aquatic Chronic	Category 2	H411
Serious Eye Damage/ Irritation	Category 2B	H319

Labeling Elements



Signal Word (GHS-US):

Hazard Statements (GHS-US):

Danger

H226 – Flammable liquid and vapor.
H315 – Causes Skin irritation.
H304 – May be fatal if swallowed and enters airways.
H336 – May cause drowsiness or dizziness.
H350 – May cause cancer.
H411 – Toxic to aquatic life with long lasting effects.
H319 – May cause eye damage/irritation.

Precautionary Statements (GHS-US):

P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 – Ground/bond container and receiving equipment.



SAFETY DATA SHEET

Diesel Fuel

P241 – Use explosion-proof electrical/ventilating/lighting equipment pursuant to applicable electrical code.
P242 – Use only non-sparking tools.
P243 – Take precautionary measures against static discharge.
P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 – Wash skin thoroughly after handling.
P271 – Use only outdoors or in a well-ventilated area.
P273 – Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse with water/shower.
P308+311 - If exposed or concerned: Get medical advice/attention.
P301+310 - If swallowed: Immediately call a poison center/doctor/...
P331 - Do NOT induce vomiting.
P370+P378 – In case of fire use firefighting foam or other appropriate media for Class B fires to extinguish.
P403+235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.
P501 – Dispose of contents/container in accordance with local/regional/national/international regulation.

Other information:

NFPA 704
Health: 1
Fire: 2
Reactivity: 0



3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Composition Information

Mixture

Name	Product Identifier (CAS#)	% (w/w)	Classification
Diesel Fuel	68476-34-6	100	Flam Liq. 3, H226; Skin Irrit. 2, H315; Aspiration 1, H304; STOT SE 3, H336; Carc.2. H350; Aquatic chronic 2, H411
Naphthalene	91-20-3	<0.1	Carc. 2, H351; Acute Tox. 4, H302; Aquatic Acute 1, H400; Aquatic Chronic 1, H410

Additional Formulation Information:

Diesel Fuel consists of C9+ hydrocarbons resulting from distillation of crude oil.

Low Sulfur Diesel Fuel typically contains less than 500 ppm of sulfur

Ultra Low Sulfur Diesel Fuel typically contains less than 15 ppm of sulfur



4. FIRST AID MEASURES

Route	Measures
Inhalation	Remove person to fresh air. If person is not breathing, ensure an open airway and provide artificial respiration. If necessary, provide additional oxygen once breathing is restored if trained to do so. Seek medical attention immediately.
Ingestion	Aspiration Hazard: DO NOT INDUCE VOMITING. Do not give liquids. Obtain immediate medical attention. If spontaneous vomiting occurs, lean victim forward to reduce the risk of aspiration. Ingestion may cause gastrointestinal disturbances including irritation, nausea, vomiting, and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory failure, and death.
Eye Contact	In case of contact with eyes, immediately flush with clean, low-pressure water for at least 15 min. Hold eyelids open to ensure adequate flushing. Seek medical attention. In case of contact lenses, remove immediately.
Skin Contact	Remove contaminated clothing and shoes. Wash contaminated areas thoroughly with soap and water or waterless hand cleanser. Obtain medical attention if irritation or redness develops. Thermal burns require immediate medical attention depending on the severity and of the area of the body burned.

Most Important Symptoms

Contact with eyes and face may cause irritation. Long-term exposure may cause dermatitis (itching, irritation, pain and swelling).

Inhalation may cause irritation and significant or long term exposure could cause respiratory insufficiency and pulmonary edema.

Ingestion may cause aspiration, gastrointestinal disturbance, and CNS effects.

Immediate Medical Attention and Special Treatment

For contact with skin or eyes, immediately wash or flush contaminated eyes with gently flowing water. If possible, irrigate each eye continuously with 0.9% saline (NS). If ingested, rinse mouth. Do NOT induce vomiting, as this may cause chemical pneumonia (fluid in the lungs).

If inhaled, administer oxygen or establish a patent airway if breathing is labored. Suction if necessary. Monitor closely, anticipate seizures. Consider orotracheal or nostracheal intubation of airway control if patient is unconscious or is in severe respiratory distress.

Discard any clothing or shoes contaminated as they may be flammable.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Foam, carbon dioxide, dry chemical are most suitable

SMALL FIRES: Any extinguisher suitable for Class B fires, dry chemical, CO₂, water spray, firefighting foam, or Halon. Small fires in the incipient (beginning) stage may typically be extinguished using handheld portable fire extinguishers and other firefighting equipment.

LARGE FIRES: Foam, carbon dioxide, dry chemical. Water may be ineffective for fighting the fire, but may be used to cool fire-exposed containers.

Specific Hazards / Products of Combustion

Moderate fire hazard when exposed to heat or flame with a very low flash point. Product is flammable and easily ignited when exposed to heat, spark, open flame or other source of ignition. Flowing product may be ignited by self-generated static electricity. When mixed with air and exposed to an ignition source, flammable vapors can burn in the open or explode in confined spaces. Being heavier than air, vapors may travel long distances to an ignition source and flash back. Runoff to sewer may cause fire or explosion hazard.

Combustion may produce smoke, carbon monoxide and other products of incomplete combustion.

Special Precautions and Protective Equipment for Firefighters

Isolate area around container involved in fire. Cool tanks, shells, and containers exposed to fire and excessive heat with water.



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For massive fires the use of unmanned hose holders or monitor nozzles may be advantageous to further minimize personnel exposure. Major fires may require withdrawal, allowing the tank to burn. Large storage tank fires typically require specially trained personnel and equipment to extinguish the fire, often including the need for properly applied firefighting foam.

Fighting Equipment/Instructions

Firefighting activities that may result in potential exposure to high heat, smoke or toxic by-products of combustion should require NIOSH- approved pressure-demand self-contained breathing apparatus with full face piece and protective clothing.

Refer to Section 9 for fire properties of this chemical including flash point, auto ignition temperature, and explosive limits.

6. ACCIDENTAL RELEASE MEASURES

ACTIVATE FACILITY SPCC, SPILL CONTINGENCY or EMERGENCY PLAN.

Personal Precautions

Due to high vapor density, flammable / toxic vapors may be present in low lying areas, dikes, pits, drains, or trenches. Vapors may accumulate in low lying areas and reach ignitable concentrations. Ventilate the area. Use of non-sparking tools and intrinsically safe equipment is recommended. Potential for flammable atmosphere should be monitored using a combustible gas indicator positioned downwind of the spill area. Refer to Sections 2 and 7 for further hazard warnings and handling instructions.

Use appropriate personal protective equipment to prevent eye/skin contact and absorption. Use NIOSH approved respiratory protection, if warranted, to prevent exposures above permissible limits. Refer to Section 8. Contaminated clothing should not be near sources of ignition.

Emergency Measures

As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Consider wind direction. Secure all ignition sources (flame, spark, hot work, hot metal, etc.) from area. Evaluate the direction of product travel, diking sewers, etc. to confirm spill areas. Do not touch or walk-through spilled material. For large spills, isolate initial action distance downwind 1,000 ft. (300 m).

Environmental Precautions

Stop the spill to prevent environmental release if it can be done safely. Product is toxic to aquatic life. Take action to isolate environmental receptors including drains, storm sewers and natural water bodies. Keep on impervious surface if at all possible. Use water sparingly to prevent product from spreading. Foam and absorbents may be used to reduce / prevent airborne release.

Spills may infiltrate subsurface soil and groundwater; professional assistance may be necessary to determine the extent of subsurface impact.

Follow federal, state or local requirements for reporting environmental release where necessary. Refer to Section 15 for further information.

Containment and Clean-Up Methods

Carefully contain and stop the source of the spill, if safe to do so. Protect bodies of water by diking absorbents, or absorbent boom, if possible. Do not flush down sewer or drainage systems, unless system is designed and permitted to handle such material. The use of firefighting foam may be useful in certain situations to reduce vapors. The proper use of water spray may effectively disperse product vapors or the liquid itself, preventing contact with ignition sources or areas/equipment that require protection.

Take up with dry earth, sand or other non-combustible, inert oil absorbing materials. Carefully shovel, scoop or sweep up into a waste container with clean, non-sparking tools for reclamation or disposal. Response and cleanup crews must be properly trained and must utilize proper protective equipment. Refer to Section 8 for appropriate protective equipment.

7. HANDLING AND STORAGE

USE ONLY AS A FUEL.

DO NOT SIPHON BY MOUTH.

Handling Precautions

Handle as a flammable liquid. Keep away from heat, sparks, and open flame. No smoking. Electrical equipment should be approved for classified area. Bond and ground containers during product transfer pursuant to NFPA 70 and API RP 2003 to



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reduce the possibility of static-initiated fire or explosion. Follow precautions to prevent static initiated fire.

Use good personal hygiene practices. Use only with protective equipment specified in Section 8. Avoid repeated and/or prolonged skin exposure. Use only outdoors or in well ventilated areas. Wash hands before eating, drinking, smoking, or using toilet facilities. Do not use as a cleaning solvent on the skin. Do not use solvents or harsh abrasive skin cleaners for washing this product from exposed skin areas. Waterless hand cleaners are effective. Promptly remove contaminated clothing and launder before reuse. Use care when laundering to prevent the formation of flammable vapors which could ignite via washer or dryer. Consider the need to discard contaminated leather shoes and gloves. Emergency eye wash capability should be available in the near proximity to operations presenting a potential splash exposure.

Special slow load procedures for "switch loading" must be followed to avoid the static ignition hazard that can exist when higher flash point material (such as fuel oil) is loaded into tanks previously containing low flash point products (such as this product) - see API RP 2003, "Protection Against Ignitions Arising Out Of Static, Lightning and Stray Currents."

Storage

Large quantities of diesel fuel are stored in tanks or portable containers at an ambient storage temperature. Separate from incompatible chemicals (Refer to Section 10) by distance or secondary containment. Keep away from flame, sparks, excessive temperatures and open flame. Use approved vented containers that are clearly labeled. Label all secondary containers that this material is transferred into with the chemical name and associated hazard(s). Empty product containers or vessels may contain flammable vapors. Do not pressurize, cut, heat, weld or expose such containers to sources of ignition.

Storage tanks should have a venting system. If stored in small containers, the area should be well ventilated, away from ignition sources and protected from potential damage or vehicular traffic. Post "No Smoking" signs in product storage areas. This storage area should comply with NFPA 30 "Flammable and Combustible Liquid Code" or applicable building code. The cleaning of tanks previously containing this product should follow API Recommended Practice (RP) 2013 "Cleaning Mobile Tanks in Flammable and Combustible Liquid Service" and API RP 2015 "Safe Entry and Cleaning of Petroleum Storage Tanks".

Incompatibles

Keep away from strong oxidizers, ignition sources and heat.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits

Component	CAS #	List	Value
Diesel Fuel	68476-34-6	ACGIH TLV-TWA	100 mg/m ³ *
Naphthalene	91-20-3	ACGIH TLV-TWA	10 ppm
		OSHA PEL	10 ppm
		ACGIH STEL	15 ppm

*Critical effects; Skin; A3; CNS impairment.

Engineering Controls

Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces. Intrinsically safe equipment and non-sparking tools shall be used in circumstances where concentrations may exceed lower flammable limits. Grounding and bonding shall be used to prevent accumulation and discharge of static electricity. Emergency shower and eyewash should be provided in proximity to handling areas in the event of exposure to decontaminate.

Personal Protective Equipment

Exposure	Equipment
Eye / Face	Wear appropriate chemical protective glasses or goggles or face shields to prevent skin and eye contact especially caused from splashing.
Skin	Wear appropriate personal protective clothing to prevent skin contact. Gloves constructed of nitrile, neoprene or PVC are recommended when handling this material. Chemical protective clothing such as of E.I. DuPont TyChem®, Saranex® or equivalent recommended based on degree of exposure. Note: The resistance of specific material may vary from product to product as well as with degree of exposure.



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Exposure	Equipment
Respiratory	<p>A NIOSH/MSHA-approved air-purifying respirator with organic vapor cartridges or canister may be permissible under certain circumstances where airborne concentrations are or may be expected to exceed exposure limits or for odor or irritation. Protection provided by air-purifying respirators is limited. Refer to OSHA 29 CFR 1910.134, ANSI Z88.2-1992, NIOSH Respirator Decision Logic, and the manufacturer for additional guidance on respiratory protection selection and limitations.</p> <p>Use a positive pressure, air-supplied respirator if there is a potential for uncontrolled release, exposure levels are not known, in oxygen-deficient atmospheres, or any other circumstance where an air-purifying respirator may not provide adequate protection.</p>
Thermal	<p>Product is stored at ambient temperature. No thermal protection is required except for emergency operations involving actual or potential for fire. Use adequate ventilation to keep vapor concentrations of this product below occupational exposure and flammability limits, particularly in confined spaces.</p>

9. PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Clear or straw-colored liquid. May be dyed red for distribution.
Odor	Mild characteristic petroleum distillate odor.
Odor Threshold	<1 ppm
pH	Not available
Melting Point	-22 to -0.4 °F (-30 to -18 °C)
Boiling Point Range	320 to 690 °F (160 to 366 °C)
Flash Point	> 125.6 °F (52 °C) PMCC
Evaporation Rate	Slow, varies with conditions
Flammability	Flammable liquid
Flammable Limits	0.6 % - 6.5%
Vapor Pressure	0.009 psia @ 70 °F
Vapor Density	> 1 (air=1)
Specific Gravity	0.83-0.86 @ 60 °F (16 °C) (water=1)
Solubility	Insoluble in water; miscible with other petroleum solvents.
Partition Coefficient (N-octanol/water)	Log Kow range of 3.3 to >.6.0
Autoignition Temperature	494 °F (257 °C)
Decomposition Temperature	When heated it emits acrid smoke and irritating vapors.
Viscosity	>3 cSt
Percent Volatiles	100

10. STABILITY AND REACTIVITY

Stability

This is a stable material that is flammable liquid (OSHA/GHS hazard category 3). Stable during transport.

Reactivity

Material is not self-reacting. Flammable concentrations may be present in air. Compound can react with oxidizing materials.



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Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Incompatibility

Keep away from strong oxidizers such as nitric and sulfuric acids.

Conditions to Avoid

Avoid high temperatures, open flames, sparks, static electricity, welding, smoking and other ignition sources.

Hazardous Decomposition Products

Carbon monoxide, carbon dioxide and non-combusted hydrocarbons (smoke).

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Acute Toxicity (Inhalation LC50)

Diesel Fuel (68476-34-6)

LC50 Inhalation Rat >6 mg/l/4h

Acute Toxicity (Dermal LD50)

Diesel Fuel (68476-34-6)

LD50 Dermal Rabbit >5000 mg/kg

Acute Toxicity (Oral LD50)

Diesel Fuel (68476-34-6)

LD50 Oral Rabbit >5000 mg/kg

Skin Corrosion/Irritation: Prolonged and repeated contact may cause skin irritation leading to dermatitis. Liquid may be absorbed through the skin in toxic amounts if large areas of skin are exposed repeatedly.

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: OSHA: NO, IARC: Group 3, NTP: NO, ACGIH: NOIC:A3, NIOSH: NO

IARC: Group 3 – Not classifiable as to their carcinogenicity to humans

ACGIH: A3 – Confirmed animal carcinogen with unknown relevance to humans.

Studies have shown that similar products produce skin tumors in laboratory animals following repeated applications without washing or removal. The significance of this finding to human exposure has not been determined. Other studies with active skin carcinogens have shown that washing the animal's skin with soap and water between applications reduced tumor formation.

IARC classifies whole diesel fuel exhaust particulates (byproduct of combustion of this material) carcinogenic to humans (Group 1) and NIOSH regards diesel fuel exhaust particulate as a potential occupational carcinogen.

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Specific Target Organ Toxicity (Single Exposure): Inhalation exposure may cause drowsiness or dizziness by inhalation exposure.

Aspiration Hazard: The major health threat of ingestion occurs from the danger of aspiration (breathing) of liquid drops into the lungs, particularly from vomiting. Aspiration may result in chemical pneumonia (fluid in the lungs), severe lung damage, respiratory failure and even death.

Potential Health Effects: Vapor irritating to skin, eyes, nose, and throat. Ingestion may cause gastrointestinal disturbances, including irritation, nausea, vomiting and diarrhea, and central nervous system (brain) effects similar to alcohol intoxication. In severe cases, tremors, convulsions, loss of consciousness, coma, respiratory arrest, and death may occur.

WARNING: The burning of any hydrocarbon as a fuel in an area without adequate ventilation may result in hazardous levels of



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combustion products, including carbon monoxide, and inadequate oxygen levels, which may cause unconsciousness, suffocation, and death.

12. ECOLOGICAL INFORMATION

Toxicity:

This material is expected to be toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment.

Data for Component: Diesel Fuel (68476-34-6)

Material is toxic to aquatic organisms based on an acute basis (LC50/EC50 >1 but ≤ 10 mg/L in the most sensitive species tested).

Material is a long-term aquatic hazard based on a chronic basis (LC50/EC50 >1 but ≤ 10 mg/L in the most sensitive species tested).

Persistence and Degradation: This material is not expected to be readily biodegradable.

Bioaccumulative Potential: Not available

Mobility in Soil: Not available

Other Adverse Effects: None known

Other Information: Avoid release to the environment.

13. DISPOSAL CONSIDERATIONS

Consult federal, state and local waste regulations to determine appropriate disposal options. May be considered a hazardous waste if disposed. Direct solid waste (landfill) or incineration at a solid waste facility is not permissible. Do not discharge to sanitary or storm sewer. Personnel handling waste containers should follow precautions provided in this document.

Shipping containers must be DOT authorized packages. Follow licensure and regulations for transport of hazardous material and hazardous waste as applicable.

14. TRANSPORT INFORMATION

US DOT

UN Identification Number	NA 1993 / UN 1202
Proper Shipping Name	Diesel Fuel
Hazard Class and Packing Group	3, PGIII
Shipping Label	Combustible liquid
Placard / Bulk Package	Combustible liquid, 1993
Emergency Response Guidebook Guide Number	128

IATA Information

UN Identification Number	UN 1202
Proper Shipping Name	Combustible-Liquid, N.O.S. (Fuel, Diesel)
Hazard Class and Packing Group	3, PGIII
ICAO Label	3
Packing Instructions Cargo	310
Max Quantity Per Package Cargo	220L
Packing Instructions Passenger	309Y
Max Quantity per Package	60L

ICAO

UN Identification Number	UN 1202
Shipping Name / Description	Combustible-Liquid, N.O.S. (Fuel, Diesel)
Hazard Class and Packing Group	3, PG III
IMDG Label	3



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IMDG

UN Identification Number	UN 1202
Shipping Name / Description	Combustible-Liquid, N.O.S. (Fuel, Diesel)
Hazard Class and Packing Group	3, PGIII
IMDG Label	3
EmS Number	F-E-S-E
Marine Pollutant	Yes

15. REGULATORY INFORMATION

U.S. Federal, State, and Local Regulatory Information

Any spill or uncontrolled release of this product, including any substantial threat of release, may be subject to federal, state and/or local reporting requirements. This product and/or its constituents may also be subject to other federal, state, or local regulations; consult those regulations applicable to your facility/operation.

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning And Community Right-to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard	Yes
Delayed (Chronic) Health Hazard	Yes
Fire Hazard	Yes
Reactive Hazard	No
Sudden Release of Pressure Hazard	No

Clean Water Act (Oil Spills)

Any spill or release of this product to "navigable waters" (Essentially any surface water, including certain wetlands) or adjoining shorelines sufficient to cause a visible sheen or deposit of a sludge or emulsion must be reported immediately to the National Response Center (1-800-424-8802) or, if not practical, the U.S. Coast Guard with follow up to the National Response Center, as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies as required.

CERCLA Section 103 and SARA Section 304 (Release to the Environment)

The CERCLA definition of hazardous substances contains a "petroleum exclusion" clause which exempts this material. This product does not contain any chemicals subject to the reporting requirements of CERCLA Section 103 or SARA 304.

SARA Section 313- Supplier Notification

This product does not contain any chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and of 40 CFR 372.

EPA Notification (Oil Spills)

If there is a discharge of more than 1,000-gallons of oil into or upon navigable waters of the United States, or if it is the second spill event of 42 gallons or more of oil into water within a twelve (12) month period, a written report must be submitted to the Regional Administrator of the EPA within sixty days of the event.

Pennsylvania Right to Know Hazardous Substance list:

The following product components are cited in the Pennsylvania Special Hazardous Substance List, and are present at levels which require reporting.

Component	CAS	Amount
Diesel Fuel	68476-34-6	100%

New Jersey Right to Know Hazardous Substance list:

The following product components are cited in the New Jersey Right to Know Hazardous Substance List, and are present at levels which require reporting.

Component	CAS	Amount
Diesel Fuel	68476-34-6	100%



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California Proposition 65 WARNING: This product contains chemicals known to the State of California to cause Cancer or Reproductive Toxicity.

Component	CAS	Amount
Naphthalene	91-20-3	<0.1%

U.S. Toxic Substances Control Act

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

CEPA - Domestic Substances List (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

Canadian Regulatory Information (WHMIS)

Class B3 – Combustible Liquid

Class D2A – Materials causing other toxic effects. (Very Toxic)

16. OTHER INFORMATION

Version	4
Issue Date	May 20, 2016
Prior Issue Date	May 3, 2015

Description of Revisions

Revised to meet Globally Harmonized System for chemical hazard communication requirements pursuant to OSHA regulatory revisions 77 FR 17884, March 26, 2012.

Abbreviations

°F	Degrees Fahrenheit (temperature)	mL	Milliliter
<	Less than	mm ²	Square millimeters
=	Equal to	mmHg	Millimeters of mercury (pressure)
>	Greater than	N/A	Not applicable
AP	Approximately	N/D	Not determined
C	Centigrade (temperature)	ppm	Parts per million
kg	Kilogram	sec	Second
L	Liter	ug	Micrograms
mg	Milligrams		

Acronyms

ACGIH	American Conference of Governmental Industrial Hygienists	GHS	Global Harmonized System
AIHA	American Industrial Hygiene Association	HMIS	Hazardous Materials Information System
AL	Action Level	IARC	International Agency for Research On Cancer
ANSI	American National Standards Institute	IATA	International Air Transport Association
API	American Petroleum Institute	IMDG	International Maritime Dangerous Goods
CAS	Chemical Abstract Service	Koc	Soil Organic Carbon
CERCLA	Comprehensive Emergency Response, Compensation, and Liability Act	LC50	Lethal concentration 50%
DOT	U.S. Department of Transportation	LD50	Lethal dose 50%
EC50	Ecological concentration 50%	MSHA	Mine Safety and Health Administration
EPA	U.S. Environmental Protection Agency	NFPA	National Fire Protection Association
ERPG	Emergency Response Planning Guideline	NIOSH	National Institute of Occupational Safety and Health
		NOIC	Notice of Intended Change



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NTP	National Toxicology Program	STEL	Short Term Exposure Limit (generally 15 minutes)
OPA	Oil Pollution Act of 1990	TLV	Threshold Limit Value (ACGIH)
OSHA	U.S. Occupational Safety & Health Administration	TSCA	Toxic Substances Control Act
PEL	Permissible Exposure Limit (OSHA)	TWA	Time Weighted Average (8 hr.)
RCRA	Resource Conservation and Recovery Act Reauthorization Act of 1986 Title III	UN	United Nations
REL	Recommended Exposure Limit (NIOSH)	UNECE	United Nations Economic Commission for Europe
RVP	Reid Vapor Pressure	WEEL	Workplace Environmental Exposure Level (AIHA)
SARA	Superfund Amendments and	WHMIS	Canadian Workplace Hazardous Materials Information System
SCBA	Self Contained Breathing Apparatus		
SPCC	Spill Prevention, Control, and Countermeasures		

Disclaimer of Expressed and Implied Warranties

Information presented herein has been compiled from sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Since conditions of use are beyond our control, we make no warranties, expressed or implied, except those that may be contained in our written contract of sale or acknowledgment.

Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in their use of the material.

**** End of Safety Data Sheet ****